July 13, 2015 1420 East 6<sup>th</sup> Ave. P.O. Box 200701 Helena, MT 59620-0701

**Environmental Quality Council** Montana Department of Environmental Quality Montana Department of Fish, Wildlife and Parks Fisheries Division **Endangered Species Coordinator** Native Species Coordinator - Fisheries Region 2 - Missoula Montana State Library, Helena MT Environmental Information Center Montana Audubon Council Montana Wildlife Federation Wayne Hadley, Deer Lodge, MT Missoula Conservation District, Missoula MT Montana River Action, Bozeman MT U.S. Army Corps of Engineers, Helena U.S. Fish and Wildlife Service, Helena State Historic Preservation Office, Helena Trout Unlimited, Missoula MT Jeff Crouch and Jennifer Boyer, Missoula MT

#### Ladies and Gentlemen:

Missoula County, Missoula MT

Enclosed is an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program (FFIP). The Program tentatively plans to provide partial funding to a project that would install a fish screen on a small irrigation ditch connected to Rattlesnake Creek, which is a tributary to the Clark Fork River near Missoula (Missoula County). The intent of the project is to prevent entrainment of salmonids, improve fish passage, and allow better control of diverted water, which may increase survival and recruitment of salmonids on Rattlesnake Creek.

Please submit any comments by 5:00 P.M., August 12, 2015 to Montana Fish, Wildlife & Parks at the address listed above. The funding for this project through the FFIP <u>is contingent upon approval</u> being granted by the Fish & Wildlife Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Michelle McGree, Program Officer

Habitat Bureau Fisheries Division

e-mail: mmcgree@mt.gov

#### ENVIRONMENTAL ASSESSMENT

Fisheries Division Montana Fish, Wildlife & Parks Rattlesnake Creek fish screen

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that direct Montana Fish, Wildlife & Parks (FWP) to administer a Future Fisheries Improvement Program (FFIP). The program involves providing funding for physical projects to restore degraded fish habitat in streams and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. This legislation was amended again in 2013 to open the program to all native fish species (statute section 87-1-283). The program now calls for the enhancement of native fish through habitat restoration, natural reproduction and reductions in species competition by way of the FFIP.

The FFIP is proposing to provide partial funding to a project calling for the installation of a fish screen on a small irrigation ditch connected to Rattlesnake Creek, which is a tributary to the Clark Fork River near Missoula (Missoula County). The intent of the project is to prevent entrainment of salmonids, improve fish passage, and allow better control of diverted water, which may increase survival and recruitment of salmonids on Rattlesnake Creek.

## I. <u>Location of Project</u>:

The project site is located on Rattlesnake Creek, a tributary to the Clark Fork River, within Township 13 North, Range 19 West, Section 14 in Missoula County (Figure 1). It is located on the north side of Missoula.

## II. Need for the Project:

One goal within FWP's Statewide Fisheries Management Plan for the fisheries management program is to "protect, maintain, and restore native fish populations, their habitats, life cycles, and genetic diversity to ensure stewardship of native species and to ensure angling opportunities whenever possible." By implementing habitat restoration projects through the FFIP, this critical goal can be achieved. This project addresses entrainment, passage, and survival of many salmonids within the Clark Fork drainage, including the native species westslope cutthroat trout, bull trout, and mountain whitefish.

#### III. Scope of the Project:

This project involves the installation of a rotary-wheel fish screen on a side channel upstream of the Hughes-Fredline ditch (Figure 2) to prevent fish entrainment and establish year-round fish passage. The existing culvert at the head of the side channel would be replaced by a formal headgate that allows for water level control and proper screen and bypass channel functionality. The side channel inlet site in Tom Greene Park is a heavily impacted river access point, and the bank would be regraded and revegetated with native shrubs and grasses.

The total estimated cost for this project is \$27,365. Of this total, the FFIP would be contributing up to \$11,865. The remaining funds will come from other sources and from in-kind services:

Contributor	In-kind services	In-kind cash				
WestSlope Chapter Trout Unlimited		\$8,500				
Yakima Fish Screen Construction Shop	\$7,000					
TOTAL = \$15,500						

# IV. <u>Environmental Impact Review Checklist</u>:

# Evaluation of the impacts of the <u>Proposed Action</u> including secondary and cumulative impacts on the Physical and Human Environment

Project Title: <u>Rattlesnake Creek Fish Screen</u>

Division/Bureau: Fisheries Division / Habitat Bureau (FFIP)

Description of Project: <u>The FFIP tentatively plans to provide partial funding to a project calling</u> for the installation of a fish screen on a small irrigation ditch connected to Rattlesnake Creek.

## A. POTENTIAL IMPACTS TO THE PHYSICAL ENVIRONMENT

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
Geology and soil quality, stability and moisture				X		
2. Air quality or objectionable odors				X		
3. Water quality, quantity and distribution (surface or groundwater)			X			X
4. Existing water right or reservation				X		
5. Vegetation cover, quantity and quality			X			X
6. Unique, endangered, or fragile vegetative species				X		
7. Terrestrial or aquatic life and/or habitats			X			X
8. Unique, endangered, or fragile wildlife or fisheries species			X			X
9. Introduction of new species into an area				X		
10. Changes to abundance or movement of species			X			X

#### B. POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Noise and/or electrical effects				X		
2. Land use				X		
3. Risk and/or health hazards				X		
4. Community impact				X		
5. Public services/taxes/utilities				X		
6. Potential revenue and/or project maintenance costs				X		
7. Aesthetics and recreation				X		
8. Cultural and historic resources				X		X
9. Evaluation of significance				X		
10. Generate public controversy				X		

#### V. <u>Explanation of Potential Impacts on the Physical Environment.</u>

## 3. Water quantity, quality, and distribution.

No changes in stream flow would occur in Rattlesnake Creek or the side channel as a result of the proposed project. Short-term increases in turbidity may occur during project construction. To minimize turbidity, operation of equipment in the stream channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization).

## 5. Vegetation cover, quantity and quality.

This project would affect vegetation during mobilization and construction, when equipment and materials are brought onsite to complete the project. Additionally, the bank at the side channel inlet site in Tom Greene Park would be regraded and revegetated with native shrubs and grasses. Long-term impacts are considered positive and would benefit the riparian areas, particularly at Tom Greene Park.

#### 7. Terrestrial and aquatic life habitats.

Construction activities that will affect terrestrial and aquatic life habitats will be short-term. Impacts would be confined to the project area and result from the installation of the fish screen and headgate. Care would be taken to avoid working in the stream at critical areas for reproduction and rearing. Long-term, this project should increase aquatic habitat through increased habitat connectivity.

## 8. Unique, endangered, or fragile wildlife or fisheries species.

This project may affect bull trout and westslope cutthroat trout; both species are federally recognized and designated "Species of Concern" in Montana. The impacts on these species as a result of this project are predicted to be positive, potentially increasing recruitment and survival. Increased fish passage and reduced entrainment are key components of this project.

#### 10. Changes to abundance or movement of species.

The installation of a fish screen should prevent the loss of salmonids down the Hughes-Fredline ditch and improve upstream fish passage into the side channel. Reduced fish losses and improved passage is expected to improve both population abundance and movement of all species utilizing the project area. This impact is considered positive.

### VI. Explanation of Impacts on the Human Environment.

#### 8. Cultural and historic resources.

No cultural or historical resource impacts are anticipated. However, the State Historical Preservation Office will be notified of this project and any potential concerns will be addressed.

#### VII. Narrative Evaluation and Comment.

There are no anticipated cumulative effects.

## VIII. <u>Discussion and Evaluation of Reasonable Alternatives</u>.

#### 1. No Action Alternative.

If no funding is provided through the FFIP, the applicant would have to seek additional sources of funding to complete the project, or the fish would continue to be entrained in the Hughes-Fredline ditch. Fish would not have upstream passage around the side channel and diversion, and the side channel inlet site at Tom Greene Park would continue to be impacted.

#### 2. <u>The Proposed Alternative.</u>

The proposed alternative intends to provide partial funding through the FFIP to install a fish screen on a small irrigation ditch connected to Rattlesnake Creek, which could prevent entrainment of salmonids, improve fish passage, and allow better control of diverted water, potentially increasing survival and recruitment of fish in Rattlesnake Creek.

#### IX. <u>Environmental Assessment Conclusion Section.</u>

1. Other groups or agencies contacted or which may have overlapping jurisdiction:

Missoula Conservation District, Montana Department of Natural Resources and Conservation, US Fish and Wildlife Service, US Army Corps of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

None.

3. Is an EIS required? No.

We conclude, from this review, that the proposed activities will have an overall positive impact on the physical and human environment, and will therefore not require the extensive analysis associated with an EIS.

4. Level of public involvement.

The project application to the FFIP has been posted on the FWP webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the FFIP. The proposed project also will be reviewed by the Fish & Wildlife Commission, and <u>funding will be contingent upon their approval</u>. The EA will be distributed to all individuals and groups listed on the cover letter and will be published on the FWP webpage: <u>www.fwp.mt.gov</u>

5. Duration of comment period?

Public comment will be accepted through 5:00 PM on August 12, 2015.

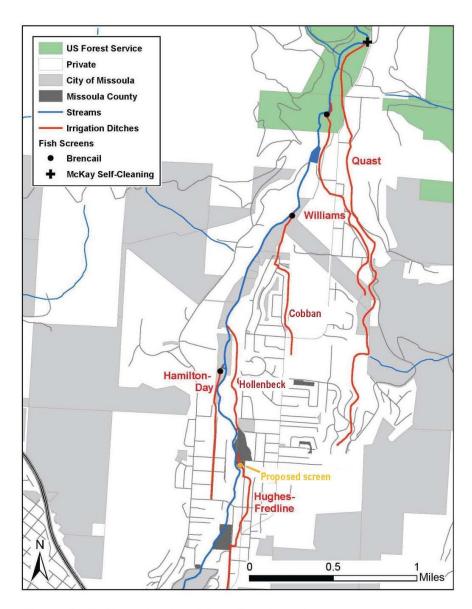
6. Person(s) responsible for preparing the EA.

Michelle McGree, Program Officer Montana Fish, Wildlife & Parks 1420 East 6th Avenue PO Box 200701 Helena, MT 59620

Telephone: (406) 444-2432 e-mail: <a href="mmcgree@mt.gov">mmcgree@mt.gov</a>

Contributor: Molly Barth, Big Sky Watershed Corps / Montana Trout Unlimited

# FIGURE 1



**Figure 2.** Rattlesnake Creek irrigation diversion network and existing fish screens.

# FIGURE 2

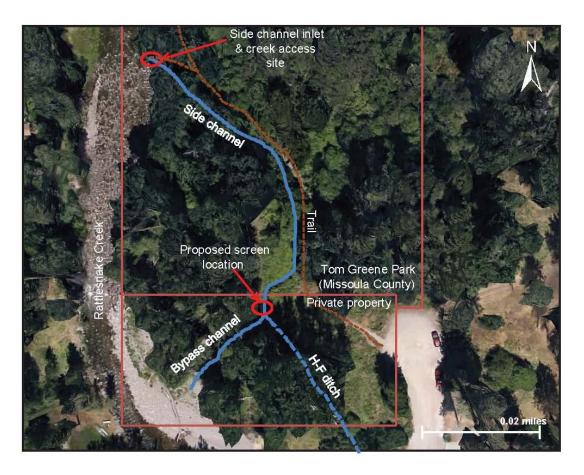


Figure 3. Project plan view map.